National Transportation Safety Board
Washington, DC 20594

Brief of Accident

Adopted 04/14/2005

DCA02MA001
File No. 17648 | 11/12/2001 | Belle Harbor, NY | Aircraft Reg No. N14053 | Time (Local): 09:16 EST

Make/Model:	Airbus Industrie / A300B4-605R
Engine Make/Model:	General Electric / CF6
Aircraft Damage:	Destroyed
Number of Engines:	2
Operating Certificate(s):	Flag Carrier/Domestic
Name of Carrier:	AMERICAN AIRLINES INC
Type of Flight Operation:	Scheduled; International; Passenger Only
Reg. Flight Conducted Under:	Part 121: Air Carrier

	Fatal	Serious	Minor/None
Crew	9	0	0
Pass	251	0	0
Other	5	0	0

Last Depart. Point:	New York City, NY
Destination:	Santo Domingo
Airport Proximity:	Off Airport/Airstrip

Condition of Light:	Day
Weather Info Src:	Weather Observation Facility
Basic Weather:	Visual Conditions
Lowest Ceiling:	None
Visibility:	10.00 SM
Wind Dir/Speed:	270 / 008 Kts
Temperature (°C):	6
Precip/Obscuration:	None / None

Pilot-in-Command Age: 42

Certificate(s)/Rating(s)
Airline Transport; Multi-engine Land
Instrument Ratings
Airplane

Flight Time (Hours)

Total All Aircraft:	8050
Last 90 Days:	146
Total Make/Model:	Unk/Nr
Total Instrument Time:	UnK/Nr

The Board's full report is available at http://www.ntsb.gov/publictn/publictn.htm.

On November 12, 2001, about 0916:15 eastern standard time, American Airlines flight 587, an Airbus Industrie A300-605R, N14053, crashed into a residential area of Belle Harbor, New York, shortly after takeoff from John F. Kennedy International Airport, Jamaica, New York. Flight 587 was a regularly scheduled passenger flight to Las Americas International Airport, Santo Domingo, Dominican Republic, with 2 flight crewmembers, 7 flight attendants, and 251 passengers aboard the airplane. The airplane's vertical stabilizer and rudder separated in flight and were found in Jamaica Bay, about 1 mile north of the main wreckage site. The airplane's engines subsequently separated in flight and were found several blocks north and east of the main wreckage site. All 260 people aboard the airplane and 5 people on the ground were killed, and the airplane was destroyed by impact forces and a postcrash fire. Flight 587 was operating under the provisions of 14 Code of Federal Regulations Part 121 on an instrument flight rules flight plan. Visual meteorological conditions prevailed at the time of the accident.

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Occurrence #1: ABRUPT MANEUVER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. COMPENSATION FOR WIND CONDITIONS - PERFORMED
2. (F) WEATHER CONDITION - GUSTS

Occurrence #2: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
3. (C) RUDDER - EXCESSIVE
4. (F) INADEQUATE TRAINING - COMPANY/OPERATOR MANAGEMENT
5. VERTICAL STABILIZER - OVERLOAD
6. VERTICAL STABILIZER - FAILURE
7. (C) VERTICAL STABILIZER - SEPARATION

Occurrence #3: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
8. AIRCRAFT CONTROL - NOT POSSIBLE

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
9. TERRAIN CONDITION - GROUND

Findings Legend: (C) = Cause, (F) = Factor

The National Transportation Safety Board determines the probable cause(s) of this accident as follows.
the in-flight separation of the vertical stabilizer as a result of the loads beyond ultimate design that were created by the first officer's unnecessary and excessive rudder pedal inputs. Contributing to these rudder pedal inputs were characteristics of the Airbus A300-600 rudder system design and elements of the American Airlines Advanced Aircraft Maneuvering Program.